Volunteer Firemen

MARCH 1939

NATIONAL FIRE PROTECTION ASSOCIATION INTERNATIONAL

60 Batterymarch Street Boston, Massachusetts

Blackington

WATER IS NEEDED ON BRUSH FIRES

THERE is no substitute for water in fighting woods and brush fires, particularly near built up areas. Brooms and shovels have their place in woods fire work, but when the wind is whipping a fire across a field of dry grass or through "scrub" growth, it takes water to knock down a fire. The above picture shows a fire department water tank apparatus going into operation at a forest fire on Cape Cod. Such equipment is of great value as a mobile water supply for fighting woods fires in sections distant from regular water supplies. This apparatus also carries a large supply of portable pump tank extinguishers. When a department has plenty of these pump tank extinguishers for brush and woods fire fighting these can be used to head off a fast spreading fire so as to protect exposed property. The pump tanks can also kill much of the blaze while hose streams are being put into operation. This is important because often such fires spread faster than hose can be laid from the truck. Pump tanks may also be used to keep a woods fire from crossing a fire break in rough sections where the laying of any type of hose may be slow, laborious work.

Ordinarily, except in special emergencies, the regular pumpers and ladder trucks should not be expected to do front line duty in woods fire work. Specially equipped apparatus is needed. Most fire departments facing woods and brush fire problems have at least one or two woods fire trucks. These are frequently light-weight machines equipped with 100 to 200 gallon water tanks, booster or forestry pumps and hose, and plenty of pump tank extinguishers. Even in the outlying sections of large cities such equipment can be mighty useful. Details of two or three men can operate a woods fire machine during danger hours and relieve the department of the serious drain on its resources which frequently occurs during an epidemic of brush fires which cause the withdrawal of men and apparatus from built up areas to suburban districts.

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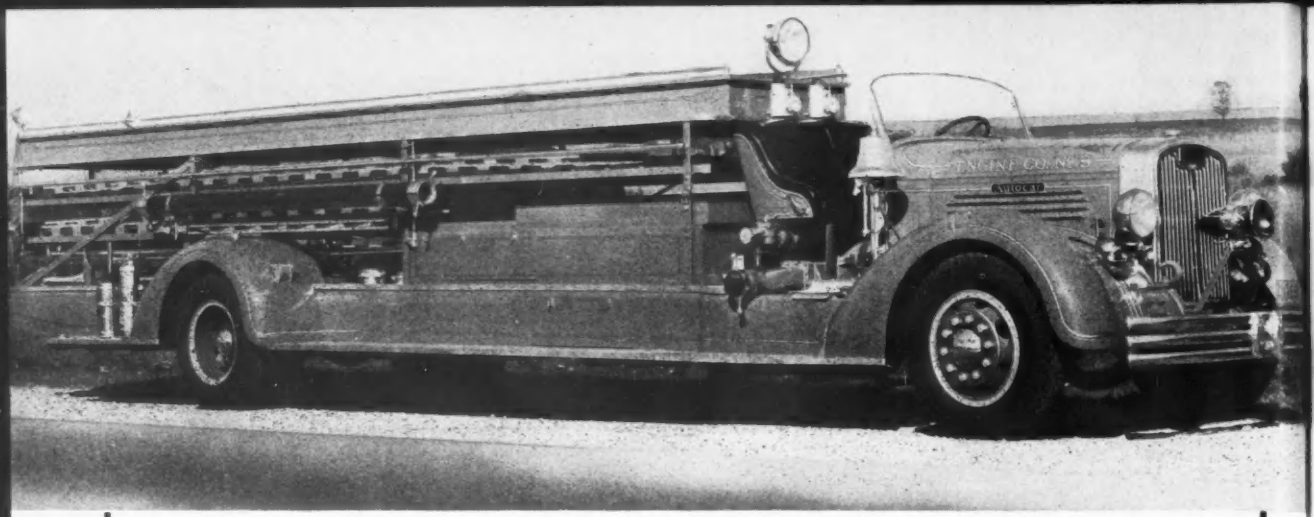

750-Gallon Autocar Quadruple Custom Built For City of Wilmington, Delaware

It is impossible for any picture to do justice to this rangy, streamlined and superbly powerful Autocar Quadruple recently put into service.

This sturdy Autocar chassis and Autocar 6-cylinder Blue Streak Engine provide surplus strength and super power for transporting and operating the standard quad equipment which includes the 750-gallon centrifugal pump, ladders, booster tank and hose body, and, in addition, varied special equipment as specified by Wilmington City officials.

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Write us today for photographs of this remarkable custom-built quad, or of any other type of equipment in which you may be interested.

AUTOCAR FIRE APPARATUS

The Autocar Company, Ardmore, Pa.

Established 1897

"Follow the Leaders For They Know the Way"

Using a Pumper Relay

GETTING water on a fire where the supply isn't nearby is no new experience to a volunteer fire department. A fire which showed how much volunteer fire companies can do in spite of this and other difficulties was that which occurred in the business district of Lincoln Park in Morris County, N. J., early on the morning of January 15, 1939. We are indebted to the Schedule Rating Office of New Jersey for the report on the fire by their engineer, H. D. Bogardus, on which the following account is based.

Morris County is protected by an active and alert group of fire companies banded together in the Morris County Fire School Association (Member N. F. P. A.) maintaining a county-wide program of firemen's training.

Seven volunteer fire companies worked at the above fire. They were handicapped by the delayed alarm due to the lack of a fire alarm system, by the bursting of hose, as well as by the lack of water. They attacked each of these handicaps with commendable resourcefulness.

The Lincoln Park fire destroyed a group of three frame store and tenement buildings. The origin is unknown as it had considerable headway when discovered by a milkman at 6:15 a.m. He promptly aroused the occupants of the second floor but there was about ten minutes delay in locating a telephone with which to send in an alarm. Finally a neighbor got the call through and the siren calling out the Lincoln Park Fire Department was sounded at approximately 6:25 a.m. The fire department responded with a 400 gallon per minute pumper carrying 750 feet of 2½-inch hose. The fire station was about 1000 feet from where the fire started.

Recognizing at once the need for a big line, the department laid its hose from the fire as far as it would reach in the direction of the nearest adequate water supply which was a brook about 1700 feet away. After laying its hose the local company set its pumper in the street ready to take water from the next pumper to arrive.

A call was promptly sent to the fire company in Mountain View located two miles away. This company is partly supported by the Borough of Lincoln Park and draws its membership from both communities. The Mountain View Company completed the first line by laying 1000 feet of hose over a railroad viaduct to the brook where it took suction. The stream was in operation approximately 25 minutes after the alarm was sounded. With this relay hook-up a stream of somewhat over 200 gallons per minute was discharged through a 1-inch nozzle tip. The 350 gallon pumper at the brook was operated at about 150 pounds per square inch pressure and the 400 gallon pumper at between 100 to 120 pounds pressure. Readers may recognize that this layout is quite similar to the relay problem presented in the January VOLUNTEER FIREMEN.

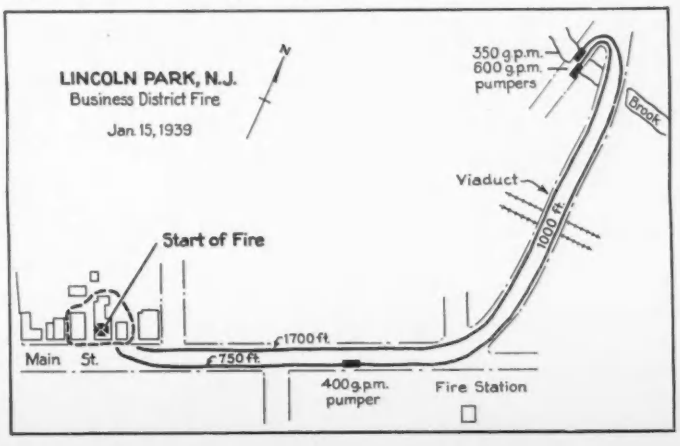
By the time the first stream was in operation the fire had completely involved the building in which it started and also the building to the east. A third building on the west had also become ignited. An effort was made to save this third building but before any effective work could be done breaks occurred in four lengths of hose. This necessitated a shut down for the replacement of two lengths and the installation of two hose jackets. The bursting of the hose caused a delay of ten minutes during which the third building became completely involved.

This hose failure emphasizes the importance of a procedure to assure that hose will not fail in service. For one thing, it must be given proper care. For another, it should be tested to 200 pounds per square inch pressure at least once yearly, so that weak or damaged hose may be taken off the apparatus. The highest pressure developed in this relay was only about 150 pounds, excepting surges due to partial throttling of the relay engine, not enough to have caused the failure of hose had it been properly maintained and tested.

Further trouble developed as a result of the lack of fire alarm hook-ups. Shortly after the Mountain View fire company was called, the fire put the telephone lines out of service. This made it necessary to send men by automobile to call other surrounding departments. The various fire companies responded in approximately the following order. The Pequannock Township Engine and Supply Co. No. 2 made a run of two miles and brought a 500 gallon pumper and a 1000 gallon tank truck. This company protected exposures to the east with two 1½-inch lines supplied through the pump from the supply tank. The Mountain View Community Co. No. 2 responded with a 600 gallon pumper. The Towaco Engine Company No. 1 came about two miles with a 600 gallon pumper. This company supplied a 1700 foot line of 2½-inch hose paralleling the relay hook-up of the first two pumpers and got a fair stream. They had some difficulty with the suction hose at the brook. The Montville Township Company No. 2 came with a 500 gallon pumper and a hose truck. The Boonton company responded with a 500 gallon pumper. These companies made runs of five to six miles and each supplied a stream from 1½-inch hose supplied through long lines from pumpers taking suction from other brooks.

Had the Borough of Lincoln Park had a water system with hydrants for fire service there is little question that the fire companies would have held the fire to the building in which it started. As it was, the loss to the three buildings was approximately $30,000.

Nevertheless the work of the volunteer companies is credited with saving several other frame structures only a few feet from the burning buildings. Damage to exposed buildings was less than $500. Fortunately firemen were helped by snow on roofs in the neighborhood which otherwise would have been endangered by flying brands.



Passing of "Chemical Truck" Now Practically Complete

MANY a citizen who turns in his own car for the latest model every year or two, thinks that the old town fire truck is still the latest word in fire fighting equipment even if it came off of the assembly line back in the days when that citizen was displaying his new "Model T." Its well polished exterior may cover up the fact that it is obsolete and undependable. There have been advances in the fire apparatus field in the past few years. Modern fire trucks are better built and better equipped from a fire fighting point of view than ever before.

Bulletins of the U. S. Bureau of Census give figures on the shipment of new fire apparatus. These figures show the total pieces of each major type of apparatus turned out by the manufacturers. As an example of changes in the apparatus market it may be pointed out that back in 1925 one out of every four pieces of new fire apparatus was a straight chemical tank truck or a chemical and hose combination without pumping equipment. In that year out of a total of 1528 new pieces of apparatus 167 or nearly 11 per cent were mere chemical units without large hose or pumps and having little other fire fighting equipment. This type of apparatus was then popular in rural districts where there were no hydrants. Although many successful stops were made with such equipment the chemical tanks all too often proved to be inadequate if a fire had gained much headway.

In 1938, by contrast with 1925, not a single straight motor chemical truck was shipped by any of the apparatus manufacturers reporting, and only 9 combination hose and chemical trucks were delivered. Rural departments today are using speedy, well-equipped pumpers. These are not necessarily large or heavy units. They carry a water tank for use on incipient fires and have a powerful pump which is equipped to take suction from brooks, wells, ponds, cisterns or any other similar water supply when there are no hydrants available. Thus modern rural fire fighters are no longer solely dependent upon meager chemical streams.

The chemical truck has become almost a museum piece along with the old fashioned horse drawn steam fire engine. Also something else is happening. Little, cranky pumpers that used to serve in small towns and outlying sections of cities were being replaced last year by dependable and more powerful pumpers. Only a little better than half of the pumpers being sold back in 1925 could turn out 500 or more gallons of water a minute. The other half had much smaller capacity. Even when operating from a hydrant, many of these required about all of their power to supply a single line. This was a serious handicap if only one hydrant was available near a fire requiring several streams. In contrast, 90 per cent of the new pumpers turned out in 1938 were rated 500 g.p.m. capacity, or above. In other words, almost every new pumper today can supply two good streams.

Today almost any chassis suitable for a fire truck has enough power to drive a pump of at least a 500-gallon capacity. Fire departments want pumps which can supply long lines at rural and suburban fires and turn out large quantities of water at big fires. As a matter of fact, pumper capacities have gone up all along the line. Not only can almost every new pumper turn out at least 500 gallons a minute, but more than one-third of the new machines rate 750 g.p.m. or better. Last year 59 new pumpers rated over 1000 gallons per minute. Only three of the machines turned out in 1925 had this extra large capacity.

Ladder trucks also have changed since back in 1925. In that year only 69 out of 147 ladder trucks manufactured in the United States were equipped with aerial ladders. Most of the trucks had only manually raised long ladders which required big crews. Aerial ladders may be operated by one or two men. Last year well over three-fourths of all new ladder trucks were equipped with aerials. The introduction of smaller size aerials in recent years has made this type of valuable fire equipment available to the smaller departments needing ladder trucks.

Today both large and small departments speak much the same language as far as fire apparatus is concerned. Formerly the smaller departments depended chiefly upon chemical or combination chemical and hose trucks. Today small departments as well as big cities are getting modern pumpers and ladder trucks.

Out of 757 new pieces of fire apparatus shipped last year 86.6 per cent were pumpers and 11.1 per cent were ladder trucks. A few special duty squad cars and combination hose trucks were also delivered.

A Problem Question FOR MARCH

Suggested for discussion at company and department meetings this month

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How should a fireman climb a ladder?

The answer to the problem question for February will be found on page 6.

Theo. A. Rosenwald, New Mexico State Firemen's Association

"Ignitze" The Fire Monster

"Ignitze" is an ingenious public education device designed by F. L. McCament of the U. S. Forest Service and used at the New Mexico State Fair with the help of the Albuquerque Fire Department. Operated by firemen inside the "fireproofed" skin, "Ignitze" has matches for horns, moves his eyes, jaws and legs, smokes viciously at a monster pipe and cigarette.

Great Fires May Occur Where Hurricane Struck

EACH Spring brush, woods and forest fires come in wholesale quantities to plague fire fighters in rural and suburban areas. Such fires are expected when warm dry weather precedes the new Spring foliage. Fires often come so fast as to tax all available fire fighting resources.

This year, firemen and forest service experts have reason to expect more trouble than usual. The great hurricane of last September swept across Long Island, New England and on into Quebec leaving three and a half billion feet of fallen timber. Much of these tangled masses of fallen trees consist of white pine. After lying on the ground all winter the dry needles burn with almost explosive rapidity. At the present time only one-half billion feet of the fallen timber has been salvaged.

Not only has this immense amount of fallen timber created a tremendous fire hazard, it has also presented at many points an almost impenetrable barrier to fire fighting operations in the woods. Many trails and woods roads remain blocked preventing the access of apparatus to fire areas as well as to brooks, water holes and other sources of water supply in the woods.

Danger by fire to fallen timber is not alone the chief worry of fire fighters in the hurricane areas. The woods are filled with summer camps and are interspersed with valuable farm property. Also, veteran forest fire officials have not forgotten that in the past great forest fires have even destroyed cities and towns. Among the greatest of such fires were those in Minnesota in 1918 and in Ontario in 1922. These great fires aided by drought and high winds swept for miles. In the 1918 Minnesota fires 559 persons lost their lives and 15 townships were burned over. In the Ontario fires 18 townships were burned over and 44 persons lost their lives. Forest experts visualize that with unfavorable weather conditions, the hurricane tangled forests of New England might present an equal opportunity for a major fire.

As a matter of fact, it does not take a hurricane to make forest and woods fires a real danger to built-up communities. Almost every year isolated buildings and groups of buildings are lost due to exposure to this form of hazard. Sometimes the fires attack on such a wide front as to overpower local fire defenses and spread into closely built up areas. Such conflagrations occurred at Berkeley, California, in 1923; Mill Valley, California, in 1929; and at Bandon, Oregon, in 1936. In all of these fires flying brands igniting wooden roofs helped to spread the fire through the built-up areas after the first buildings became ignited.

Blackington

This tangled mass of timber at the Harvard Forest in Petersham, Massachusetts, is typical of the great damage that occurred in private, state and national forests in New England as a result of the hurricane of last September 21. Little more than this picture is needed to visualize the great dangers from forest fires and the practical impossibility of getting at a fire located in the center of such a windfall.

To minimize the danger to buildings from grass and brush fires vacant lots should be burned over under fire department supervision. Householders should be warned to keep the dry grass cleared away from their buildings because sometimes when a fire sweeps down on several buildings at once it is impossible for firemen to protect every exposed structure. If dry grass has been allowed to remain close to the sides of a frame building flames can quickly spread to shingles or clapboards.

Most brush and woods fires in rural and suburban areas are man caused by open fires or through carelessness with smoking materials. Householders should be warned to use only incinerators which do not permit the escape of burning materials in a breeze.

Where persons live at a distance from a fire company it would pay them to give some thought to protection against grass and brush fires which might cause serious damage before apparatus could arrive. A garden hose is useful within a short radius of buildings so equipped. For persons inclined to keep them in order, ready for instant use, pump tank extinguishers are useful protection. They can be effectively used on field or brush fires threatening orchards, outbuildings and other property.

NEW CATALOGUES

This department is for the convenience of readers who wish to be advised of new products or services in the fire field. When writing for catalogues please mention VOLUNTEER FIREMEN

■

Akron Brass Mfg. Company, Inc., Wooster, Ohio. Two color bulletin describing the new Akron siphon.

American District Telegraph Company, 155 6th Ave., New York, N. Y. Two color, 30 pp., illustrated booklet, "Backing Up the Sprinkler." Describes sprinkler supervisory service.

American-La France-Foamite Corporation, Elmira, N. Y. 6 page, two color, illustrated bulletin describing the new "Poweron Nozzle" throwing a discontinuous stream useful on electrical and oil fires.

Federal Electric Co., 8717 South State St., Chicago, Ill. Bulletin No. 62. Details of Federal sirens.

The Fyr-Fyter Co., Dayton, Ohio. Four page, two color bulletin describing 40 gallon "Instant" anti-freeze extinguisher for mounting on a truck or trailer.

Gamewell Co., Newton Upper Falls, Mass. Illustrated catalogue entitled, "The Three-Fold Fire Alarm System." Describing complete fire alarm central station and box equipment.

Pyrene Manufacturing Company, 560 Belmont Ave., Newark, N. J. Four page, two color, illustrated bulletin describing "Phomaire Play Pipe," models PP 14 and PP 24.

D. B. Smith & Co., Utica, N. Y. Catalogue describing Indian Fire Pumps for forest, brush, grass and spot fires.

U-C-Lite Manufacturing Co., 500 North Dearborn St., Chicago, Ill. Four page, two color, illustrated bulletin describing "Big Beam," super-power, rechargeable electric hand lamp.

Leg Locks, ALSO

PUTTING A LADDER ON THE ROOF

WHEN working from ladders it is frequently necessary to have both hands free to do such work as directing hose streams, handling roof ladders or hauling up fire tools. No man working on a ladder should let go his hold with both hands unless he has properly secured himself to the ladder so that he will not lose his balance and fall. Of course if the man working on a ladder is wearing a life belt or rope tool he simply snaps the hook to the rung of the ladder and has his hands free. However, such equipment is not always available so the fireman must know how to secure himself to the ladder and still have his hands free. This is very easily done by taking a leg lock on the ladder.

The use of the leg lock is so commonplace that it is almost second nature to experienced fire fighters. However, there are some variations in the practice of different firemen and for different jobs one form of leg lock may have advantages over another.

To take a leg hold or leg lock, the ladderman places one leg through the ladder over the second rung above the one upon which he is standing. He then brings his foot back through the ladder between the first and second rungs and places the toe of his foot over the rung above the one on which he is standing. Men of more than average height may prefer to lock the foot around the beam of the ladder just below this rung although this may not be possible on all types of ladders. When work is being done which does not necessitate facing the ladder, a side sitting position may be taken on the rung over which the leg has been placed. This type of hold is useful when hauling up tools or other objects at the side of the ladder.

The leg lock is made on the side of the ladder opposite the side on which the work is being done. As most work is done on the right side the leg lock is usually made with the left leg. The arch of the lower foot on which the weight is carried should be on the rung near the beam in a position from which it will not slide should the ladder be wet or slippery.

Placing A Roof Ladder With Two Men

THE familiar roof ladder with its folding hooks is part of the standard equipment of every pumper as well as all ladder trucks. These ladders have many important uses such as for reaching roof, attic and chimney fires and to permit opening of roofs for ventilation of smoky fires. Where a ladder truck is usually not available, as in suburban and rural fires, pumper company crews get quite a bit of use out of their roof ladders.

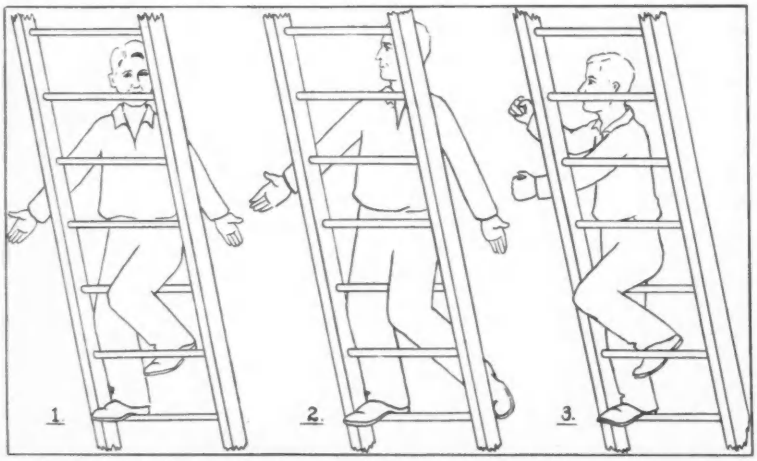
The following is a two man raise for a roof ladder. In most departments roof ladders range from 12 to 22 feet or more in length. Some departments, which frequently find themselves shorthanded, expect one man to place the shorter roof ladders alone and use the two man raise only with ladders above 16 feet long. However, as the placing of a roof ladder usually follows the placing of a wall ladder to the eaves of the building, the same men used to place the wall ladder might normally be expected to work together in placing the roof ladder.

After the wall ladder has been placed to reach above the eaves, the roof ladder is placed on the ground parallel with the wall of the building and usually at the right of the wall ladder. The butt of the roof ladder should be close to the base of the right beam of the wall ladder. Two men then raise the roof ladder to a vertical position. In general, the standard fire department method of raising ladders should be used as it promotes teamwork and provides experience which makes the handling of larger ladders easier work.

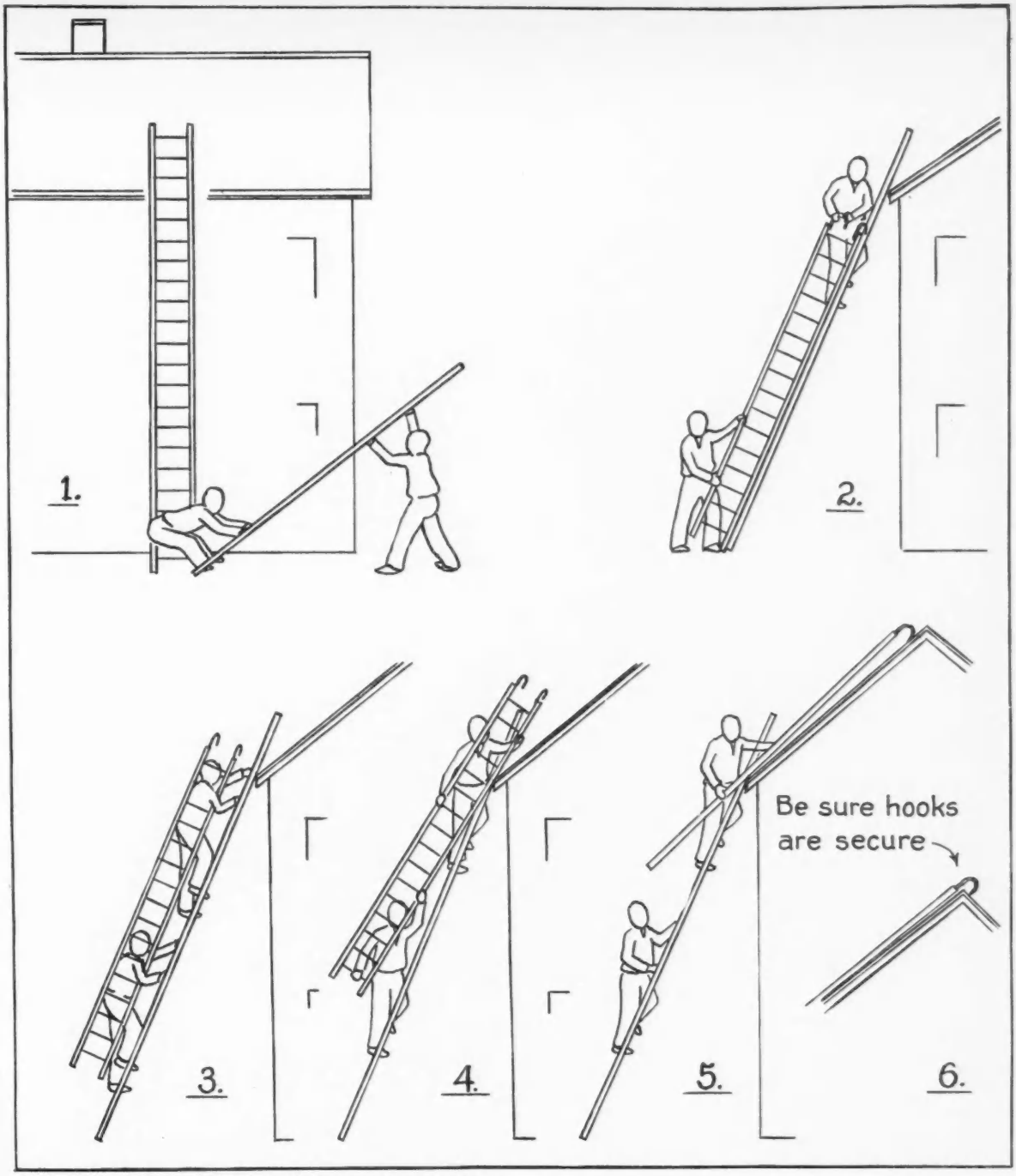
When the roof ladder is in a vertical position at the right side of the wall ladder, the first man ascends the wall ladder. When he is opposite the top of the roof ladder, he opens the hooks outward. In most ladders this is done by forcing the shank of the hook downward to clear a catch and turning the hooks outward. The hooks should always line up with the beam of the ladder. Hooks are opened outward as the roof ladder should be turned away from the wall ladder when placed on the roof. This is also a safety measure to prevent the hooks from striking the man carrying the ladder should the ladder slip from his grasp.

After making sure that the hooks are securely open, the top man steps down a bit and places the roof ladder on his right shoulder at a point between its second and third rungs. The second man also carries the ladder on his right shoulder. This gives each man both hands free for climbing.

When the top man is waist high to the eaves of the building he stops climbing and takes a leg hold on the wall ladder. The leg lock is made with the leg on the opposite side from which the roof ladder is carried. He then passes the roof ladder upward hand-over-hand. When it is half above the



Standard methods of taking a leg hold or lock on a ladder are shown above. Examples 1 and 2 are similar except that taller men may prefer to hook their foot around the beam of the ladder rather than under the rung. When work is being done which does not necessitate facing the ladder, a sitting position may be taken on the rung which is being straddled as shown by figure 3.



Evolution drawn by Lieutenant R. W. McBrien, Fire Department, Lynn, Massachusetts

Simple steps for placing a roof ladder. 1. Raise ladder. 2. Open roof hooks outward. 3. Climb to eaves with roof ladder on shoulders. 4. Pivot roof ladder on beam on edge of roof. 5. Push ladder up roof on hooks. 6. Make sure hooks are secure before climbing.

eaves, the beam of the roof ladder is allowed to come to rest on the roof. The ladder is then turned flat with the hooks underneath so that they may be used as runners as the ladder is pushed up over the ridge of the roof. Care should be taken to see that the hooks are securely engaged before climbing the roof ladder.

Because most persons are right handed, the usual practice is to raise the roof ladder at the right side of the wall ladder. However, conditions at the fire such as wires and projections should be noted from the ground and the roof ladder may be carried on the shoulder which will give the least interference.

Acknowledgment is made of helpful suggestions made by Chief J. Ray Pence, Stillwater, Oklahoma; Chief G. Frank Williams, Texas Firemen's Training School; Battalion Chief Robert B. Rogers, Seattle, Washington; and Assistant Chief Henry Haddock, Drillmaster, Lynn, Massachusetts.

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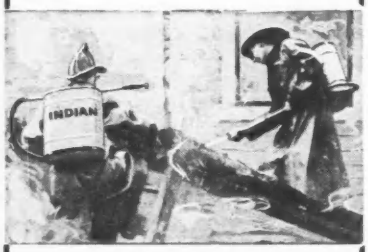

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Los Angeles, Cal.

FIGHT FIRE WITH INDIANS

Volunteer Firemen

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March, 1939

THE sudden deaths of eight firemen under the falling roof and walls of a burning building in Syracuse, N. Y., on February 3, 1939, shocked fire fighters and their friends everywhere. Falling walls have always been one of the greatest dangers faced by fire fighters. Only those who have had experience with falling walls can really appreciate the suddenness with which a burning building may collapse without warning.

Walls normally fall away from the greatest heat. The side of the wall towards the fire expands with heat; the cool side does not expand. The result is that the wall slowly bends outward until it falls, sometimes as though hinged at the bottom. Walls, however, frequently fall inward when supports collapse or timbers fail. When floor timbers are built solidly into the wall the timber when it collapses may act as a giant lever to tip the whole wall in. One basic principle of properly built brick structures is to have timbers arranged to be self releasing, so that when they fall they will not also take down the walls. Thin brick or masonry veneer walls insecurely attached are another source of danger.

Warning of the failure of walls sometimes comes from the appearance of long cracks or fissures which show up in the brick work. These are obvious danger signals. However, if firemen are to know which walls are likely to collapse in a fire they must find this out beforehand through having made inspections of the building. When an old brick building is badly involved by fire it may be necessary to use heavy streams from a safe distance. Also hose lines may be taken into adjoining buildings which have independent walls and are not directly under dangerous walls of a taller building.

THERE are now more than 14,000 volunteer firemen members of the Volunteer Firemen's Section of the National Fire Protection Association. This represents a growth of 1,500 members since last March. Much of this growth is due to the good word passed along to neighboring departments by firemen already members of the Section. To be specific, last month 33 departments with 620 men joined the Volunteer Firemen's Section for the first time. In addition 52 departments with 1183 men renewed membership. This brings the total enrollment to 637 departments and 14,071 men. The following departments were enrolled in the past month.

Silbak Premier Mines, Ltd., Premier, British Columbia.
Mansfield Volunteer Fire Company, Mansfield, Connecticut.
Federal Hardware and Implement Mutuals, Atlanta, Georgia.
Earlville Fire Department, Earlville, Iowa.
McGregor Hook and Ladder Company No. 1, McGregor, Iowa.
East Machias Fire Department, East Machias, Maine.
Scarborough Firemen's Association, Scarborough, Maine.
Strong Fire Department, Strong, Maine.
Boonsboro Fire Company, Boonsboro, Maryland.
Rivera Beach Volunteer Fire Company, Inc., Pasadena, Maryland.
Palmer Fire Department, Palmer, Massachusetts.
Uxbridge Fire Department, Uxbridge, Massachusetts.
Bowater's Newfoundland Pulp and Paper Mills, Ltd., Corner Brook, Newfoundland.
Hammonton Volunteer Fire Company No. 1, Hammonton, New Jersey.
Haworth Fire Department, Haworth, New Jersey.
East Hanover Volunteer Fire Company, Whippany, New Jersey.
Allegany Engine Company No. 1, Allegany, New York.
Central Square Fire Company, Central Square, New York.
Hooker Electrochemical Company, Niagara Falls, New York.
Selkirk Fire Company, Selkirk, New York.
Fallsburg Fire Department No. 1, South Fallsburg, New York.
Zeeland Volunteer Fire Department, Zeeland, North Dakota.
Stillwater Safety Council, Stillwater, Oklahoma.
Beatty Bros., Ltd., Fire Department, Fergus, Ontario.
Protection Hose Company No. 1, Thorold, Ontario.
Malvern Fire Company, Malvern, Pennsylvania.
Avon Fire Department, Avon, South Dakota.
Denton Fire Department, Denton, Texas.
Kilgore Fire Department, Kilgore, Texas.
Matador Volunteer Fire Department, Matador, Texas.
Rockport Volunteer Fire Department. Rockport, Texas.
Everson Volunteer Fire Department, Everson, Washington.
Prairie du Sac Volunteer Fire Company, Prairie du Sac, Wisconsin.

Membership in the N.F.P.A.
for Your Company or Department

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

Your company or department applies for regular membership in the N. F. P. A. and pays the minimum $10 annual dues. When the application is accepted, the company or department begins to receive at headquarters the monthly bulletins and publications sent regularly to all members of the Association. Also comes a 100-page *Quarterly* Magazine (four times during the membership year), a volume of annual Proceedings (over 400 pages), a Directory of members, and an Index to printed publications. You thus build up a nice fire library. Membership also places at the disposal of the company or department the Information Service of the Association which from its voluminous files answers special inquiries from members free.

Membership Plan Includes VOLUNTEER FIREMEN for Your Company or Department

The publications and services enumerated above are what regular N. F. P. A. members get for their $10 annual dues. The special membership plan of the Volunteer Firemen's Section provides that *in addition* you get VOLUNTEER FIREMEN magazine for the men in your company or department. (The $10 minimum dues allows you to enroll up to 20 men to receive the magazine: 50c per year extra for each man in excess of 20 enrolled.) VOLUNTEER FIREMEN is mailed to each man's home address.

USE THIS COUPON FOR SPECIAL MEMBERSHIP PLAN

If your company or department is now a member, pass this coupon to some other company or department which might like to enjoy the benefits of this plan.

National Fire Protection Association, 60 Batterymarch St., Boston, Mass.:
Please send me a membership application blank. I am interested in your special membership plan for our company or department.

Name ..... Rank .....
(Chief, Sec'y, Capt., etc.)

Name of Company or Department .....

Address

THE INSTANT
(LOADED-STREAM) TYPE

The ultimate in fire protection equipment — for use in winter months (as well as summer) and which both fire departments and private industry are recognizing as the last word in chemical fire extinguishment.

QUICK,
DEPENDABLE

OPERATES
EFFECTUALLY
IN ANY
TEMPERATURE

"UNCANNY"
IN ITS
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UPON FIRE

DEALERS WANTED

If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

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N.F.P.A. HANDBOOK

6,000 Copies
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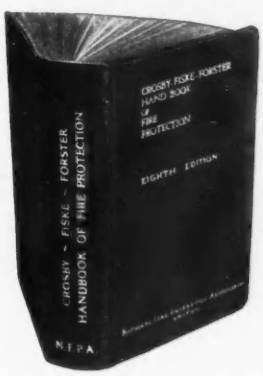

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National Fire
Protection Association
INTERNATIONAL
60 Batterymarch St., Boston, Mass.

For Yourself, Too

Wouldn't You, Personally, Like to Be a Member of the N.F.P.A.?

Your fire company or department may or may not be a member of the N. F. P. A. But, if you choose, you may have a membership in the N. F. P. A. enabling you personally to enjoy its unusual advantages.

Membership will help you in your fire work, to answer questions asked by the public about fire. It will help you if you're studying for promotion or if you are just trying to build up a good fire library.

Dues are only $10 per year and this is the only expense. There is probably no way you can do so much by yourself in fire work for so little money. Last year members received 109 separate publications, 44 items regularly and 65 others sent on request. VOLUNTEER FIREMEN is sent to any member requesting it at no extra cost. As a member you would receive the publications and services listed below.

Quarterly Magazine. Four issues of an authoritative journal, 100 pages each handsomely printed and profusely illustrated, containing valuable articles on fires, fire hazards and fire prevention. Sample free.

News Letter. A monthly bulletin to members advising them of latest developments, new and important publications available. Fifty-three such publications were brought to members' attention through this News Letter last year.

Proceedings of Annual Meeting. Each member receives this 400 page volume of the transactions of the Association.

Year Book and Directory. Complete list of members, including addresses.

Index to subjects covered in the various publications of the Association.

Information Service. The Executive Office maintains voluminous files to answer members' questions.

APPLICATION FORM

National Fire Protection Association, 60 Batterymarch St., Boston, Mass.:
Please enroll me as an associate member and forward the publications to which members are entitled. I understand that membership does not commit me to any course of action. Check which of the following applies:

☐ I am enclosing $10 (check or money order) for the annual dues.

☐ Please bill me for $10 as my annual membership dues.

Name .....

Rank or Business Connection .....

Address

VOLUNTEERS! Here's a New Siren Built For Volunteer Firemen

• Federal presents the new Volunteer siren to meet modern day requirements, providing a siren of tone quality, dependability, and performance, at the remarkably low price of $14.00. VOLUNTEERS! Here is the protection to which you are entitled! Assure your own safety, as well as that of your community, by investing a few dollars in a siren that will give you results. It paves the way through traffic—gets you there quickly and safely.

• Not only is it constructed for durability and to withstand all abuse but its streamlined appearance will add distinction to any vehicle.

• Consumes less current than a car heater or radio. Available in two models, the "V" in chrome, the "O" in black duco. Complete with foot switch and cable.

Model "O"

The New VOLUNTEER

Model "O", Black, only $14.00
Model "V", Chrome, only $15.00

Tear off this coupon and mail TODAY!

Federal Electric Company, Inc., 8717 South State St., Chicago.

Send me a Volunteer Siren,

Model ....., Priced at ..... for 10 day trial.

Name & Title .....

Address .....

Town ..... State .....

Can be returned in ten days for full credit, if not satisfactory.

$10.00 - $3.00 - $2.00 EACH MONTH

PYRENE PRIZE LETTER CONTEST

EACH month three fortunate firemen win cash prize awards for telling of effective work done with approved fire extinguishers. The monthly prizes are: first prize, $10.00; second prize, $3.00; and third prize, $2.00. These prizes go to the winners of the Pyrene Prize Letter Contest conducted jointly by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN. To win one of the prizes does not require any fancy writing ability. If you know of a fire where good work was done with an extinguisher just tell the facts in your own way. The judges want to know what type the extinguisher was (carbon tetrachloride, soda-acid, foam, carbon dioxide, calcium chloride, loaded stream or dry chemical). It is not necessary to tell the make of the extinguisher. The contest is open to members of fire departments including organized industrial fire brigades.

FIRST PRIZE—$10.00

JOHN YODER
Fire Department, Bellefontaine, Ohio

Oil Stove Explosion

"On January 28, we received an alarm from a residence. When we arrived we found that an oil stove had exploded in a bathroom. The entire room was a mass of flames. Flames were extending across an adjoining room and had set fire to the door and casing on the opposite side ten feet away. We stopped in front of the house and two of the boys each grabbed a soda-acid extinguisher. As the house set back about 200 feet from the street I was ordered to back the pumper in to the house and did so. Seeing so much fire I at once started the pump and began pulling out the booster hose. Just then the chief came out and assured me that it wasn't needed. They had killed the fire completely with the two extinguishers. I have been on the department over ten years and have used extinguishers on many fires but this was the most fire I have seen put out with so little chemical."

SECOND PRIZE—$3.00

CLAY GILBERT, *Chief*
Fire Department, Matador, Texas

Saved Mattress Factory

"About two years ago we answered a call to a local mattress factory that was on fire. The mattress maker was blowing the cotton into a tick when suddenly the unfinished mattress burst into a mass of flames. An open can of gasoline which happened to be nearby also ignited. The blaze spread up the wall and ignited a large amount of rubber belting. I came off the truck with a 2½ gallon foam extinguisher at the same time the nozzleman came off with the hose. I began to work on the gasoline fire and soon had it out. I then started to work on the main blaze and had the entire blaze out before the connections could be made and water obtained at the nozzles. Of course we used water to wash out the smouldering cotton but the extinguisher had completely whipped the blaze."

THIRD PRIZE—$2.00

GERALD D. BROWN
Fire Department, Albany, Calif.

Thought It Incredible!

"One evening just after nightfall we received a call by telephone reporting a fire. The two trucks responding to the call were more than two blocks from the address when the men could see the flames and illumination caused by a fire which we were certain would necessitate the laying of lines. While the pumper prepared to lay from the hydrant, our truck continued to the scene of the fire. We found an automobile fully involved and shooting up flames that were mushrooming against an overhanging porch of a house. Upon arrival one of the men grabbed a 1-qt. carbon tetrachloride gun from the truck and attacked the fire while another using a pike pole pulled the machine from the driveway. By the time the hose was laid and water was in readiness the entire fire was reduced to a few wisps of smoke through the effectiveness and quick manipulation of the extinguisher. As water was being used to cool down the burning embers on the house astonished bystanders still thought it incredible that a small extinguisher could subdue the fire they had seen a few minutes before, and protect the dwelling that seemed certain to be damaged."

HONORABLE MENTION

HARRY BEASLEY, *Chief*, Volunteer Fire Department, Chrisney, Indiana.

WILLIAM BOHN, Fire Company, Berwyn, Pennsylvania.

E. S. FRIES, Fire Department, Dover, New Jersey.

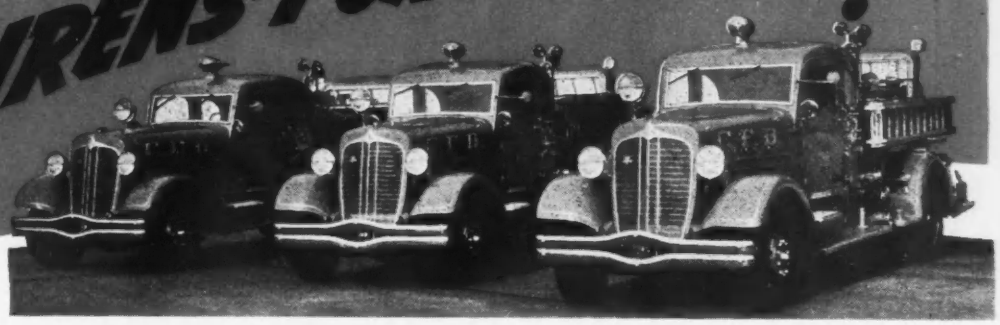
THOMAS STAAL, *First Lieutenant*, Fire Department, Oceanside, Long Island, New York.

DICK VALENTINER, Fire Department, Madeira, Ohio.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

CINCINNATI SELECTS 3 MORE AHRENS-FOX PUMPERS!



IN 1853 Mr. Chris Ahrens, founder of the Ahrens Manufacturing Company, and father of John P. Ahrens, vice-president of Ahrens-Fox, helped build the first successful steam fire engine in this country. This engine saw service in the Cincinnati Fire Department.

Since then more than one hundred pieces of Ahrens-Fox fire apparatus have successfully served the Cincinnati Fire Department. And now Cincinnati selects three more Ahrens-Fox Pumping Engines!

Ahrens-Fox apparatus is designed and built by men who are specialists in the building of dependable motor fire apparatus and who know the needs of the service from long lifetimes of experience. Thus Cincinnati's new equipment performs beyond all expectations!

No matter what type of pumper your city needs, remember that Ahrens-Fox are specialists in the building of dependable motor fire apparatus. Write for full information—and make your own comparisons.

THE AHRENS-FOX FIRE ENGINE CO. • • • CINCINNATI, OHIO

ONE OF THE THREE new Centrifugal Pumpers of the Cincinnati Fire Department.

AHRENS-FOX QUALITY

NEW! Note the rear windshield with hangers for 4 men. Complete protection without sacrificing utility of the apparatus. The windshield can be tilted up out of the way when stretching in or loading hose.

EVERY TYPE OF PUMP FOR EVERY TYPE OF SERVICE

STARTLING, *but true*. . .

THE statement above, attributed to the United States Chamber of Commerce, confirms the findings of other eminent authorities on the subject of fire protection. Unnecessary fire losses result from the inadequate distribution of fire alarm boxes.

Fire alarm boxes should be located at all points of fire hazard within the community. *Visibility is also of extreme importance*—boxes should be installed on their own individual supports so that the citizens may become familiar with their purpose and locations.

Lower fire losses follow elimination of delay in transmitting alarms. Expenditures for properly planned fire alarm systems are profitable investments. The people who make the city—the taxpayers—should be acquainted with the facts.

Our facilities and three-quarters of a century of experience in planning fire alarm protection are freely available to all municipalities. Write for descriptive literature.

The GAMEWELL CO.

NEWTON UPPER FALLS, MASS.